



National Seabird Program

Bycatch Reduction Engineering Program
(BREP)

Annual Steering Committee Meeting

September 1-2, 2010
Alaska Fisheries Science Center
Seattle, WA



\$K Amt	FY04	FY05	FY06	FY07	FY08	FY09	FY10	% change since FY04
Requested	227	253	409	564	564	443	na	>95%
Received	200	227	227	227	229	229	229	15%

WORKSHOP.....FY 09 Funds

- To meet our seabird responsibilities in a consistent manner
- NMFS seabird contacts in regions, centers, headquarter offices --- never in same place at same time!
- Resources...budget...\$\$\$

NOAA Fisheries Service & Seabirds...

Our Responsibilities

- ✓ Magnuson-Stevens Fishery Conservation & Management Act (**BREP**)
- ✓ Endangered Species Act
- ✓ National Environmental Policy Act
- ✓ U.S. National Plan of Action on Seabird Bycatch in Longline Fisheries
- ✓ FAO's Best Practice Technical Guidelines
- ✓ NMFS's Strategic Plan...& for Fisheries Research
- ✓ NOAA Fisheries National Bycatch Strategy & Report
- ✓ Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds
- ✓ USFWS Birds of Conservation Concern

NOAA Fisheries Service & Seabirds...

Our Responsibilities

- ✓ **Magnuson-Stevens Fishery Conservation & Management Act**
- ✓ Bycatch definition...
- ✓ Section 316, Bycatch Reduction Engineering Program (BREP) & Coordination on Seabird Interactions
- ✓ Section 303b12, FMPs may include measures to conserve non-target species
- ✓ NOAA Fisheries National Bycatch Strategy

WORKSHOP OBJECTIVES

Initiate the development of a seabird implementation plan at both the national and regional levels that can be used to:

- ✓ describe and provide insights regarding NMFS seabird activities and important partnerships with management entities including the U.S. Fish and Wildlife Service,*
- ✓ guide NMFS management and science, and*
- ✓ provide input to the NMFS long-term planning and budget process.*

AGENDA

Day 1 – Plenary.....**'everyone up to speed!'**

Morning

Opening Remarks "NOAA Fisheries and Seabirds: The Importance of these Feathered Oceanographers to NOAA"
George Hunt

Pre-workshop Questionnaire Summary, Nicole LeBoeuf

How to Get Seabirds from the Twilight Zone to PPBES,
Gordon Waring

PPBES for the National Seabird Program, Philip Hoffman

Day 1 – Plenary.....'everyone up to speed!'

Afternoon

Thematic Presentations...logical sequencing....basis for Days 2 & 3 Group Work

Pelagic seabird abundance and distribution and overlap with fisheries (George Hunt)

Anthropogenic impacts (e.g. bycatch/entanglement) and Mitigation (Kim Dietrich, consultant)

Management and Coordination in/among Agencies and Stakeholders on Shared Objectives: An Alaska Case Study (Greg Balogh, Kim Trust—USFWS; Shannon Fitzgerald, Kristin Mabry, Kim Rivera—NMFS; Bill Wilson—North Pacific Fishery Management Council)

Ecosystem Approach to Management—Seabirds as Indicators of Marine Health (Doug DeMaster)

Priorities and Opportunities for Marine Bird and Forage Fish Research in the North Pacific (John Piatt, USGS)

International Aspects of the NMFS Seabird Program (Nicole LeBoeuf)

Emergent Themes from Workshop

- ✓ Continue seabird bycatch work
- ✓ Improve networks, outreach
- ✓ Data inventory
- ✓ Integrate seabirds into ecosystem-based approaches to fishery management
- ✓ 'formalizing' Seabird Program
- ✓ Improve/enhance authority

FY 10 Budget.... \$229K

Salary ~79K

Travel ~16K

Projects ~134K

SEFSC, 15K

Seabird Bycatch in the Western North Atlantic
Pelagic Longline Fishery...continuation

- ✓ seabird identification training for observers
- ✓ seabird training materials and reporting forms
- ✓ seabird bycatch estimation analysis

AFSC, 26.5K Coordinated Seabird Studies

- ✓ understanding seabird/fishery interaction on trawl vessels
- ✓ direct food habit analysis
- ✓ stable isotope analysis of seabird feathers





Feather with three pieces clipped out for stable isotope analysis. Using stable isotope analysis, samples collected from different sections of this Laysan Albatross flight feather were used to assess the bird's diet at different times of year. Diet over a period of 7 weeks can be sampled from a single feather, and diet over a 4-month period can be sampled from five flight feathers.

NEFSC, 32.5K

- ✓ ~ 18 different seabird species as bycatch
- ✓ gannets, gulls, greater shearwaters, loons
- ✓ 10 to 11 different gear types
- ✓ takes in all months
- ✓ first published estimates in 2008-09
- ✓ use of PBR approach to estimate impact of seabird bycatch on common and red-throated loon populations

SWFSC, 16K

Seabird Distribution in the Hawaiian Archipelago

- ✓ Collect data on distribution, abundance, and behavior of seabirds in EEZ waters off Hawaii
- ✓ 2010 survey is repeat of 2002
 - ✓ investigate changes in bird community since 2002
 - ✓ produce maps for overlap with fisheries
 - ✓ estimate abundance of seabirds using at-sea data, particularly T&E spp and those difficult to census from colonies

SWFSC, World Seabird Conference, 5K
+ 5K from FY09 and 10K from IA = major sponsor

- ✓ 17 NMFS staff attending/presenting
- ✓ NOAA booth
- ✓ NOAA speaks at opening session

UW/WSG, OSU, CIMRS (NWFSC), 12K Seabird Bycatch Avoidance for West Coast Groundfish Fisheries

Objective: Map distribution of albatrosses along the US West Coast to determine where seabirds may be at risk of mortality from WC groundfish fisheries and initiate outreach on need for seabird conservation

- 1) Gathering and mapping seabird distribution data
- 2) Port-to-port workshops for WC longline fleet

NWFSC (Pt Adams Research Station) 5K Fisheries-independent marine bird surveys

- ✓ Pilot training program for seabird observers on NMFS research operations in Pacific Northwest (WA, OR, northern CA)
- ✓ geo-referenced bird sightings to analyze spatial overlap between marine bird distributions and WA/OR/CA fisheries
- ✓ more NOAA cruises collecting whole-ecosystem datasets

Charter research vessel, *F/V Frosti*



Marine bird survey computer running "Seebird"
F/V Frosti
2010 Salmon Ocean Ecology Cruises



Jen Zamon (NWFSC) bird survey aboard *F/V Frosti*



Are they bird food? Juvenile Pacific salmon

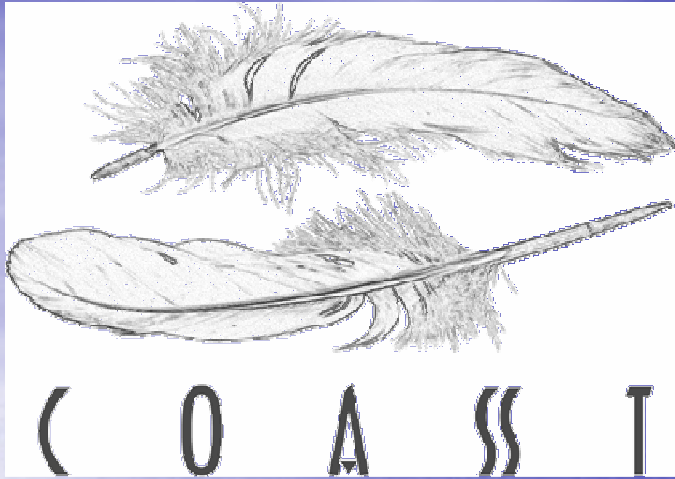


Birdie visitor! Xantus' murrelet w/Arnold Amman
(SWFSC)



The background of the slide is a photograph of a vast, deep blue ocean stretching to the horizon. The sky above is a lighter blue with wispy white clouds. The overall image has a strong blue color cast.

University of Washington, COASST, JISAO,
~7500



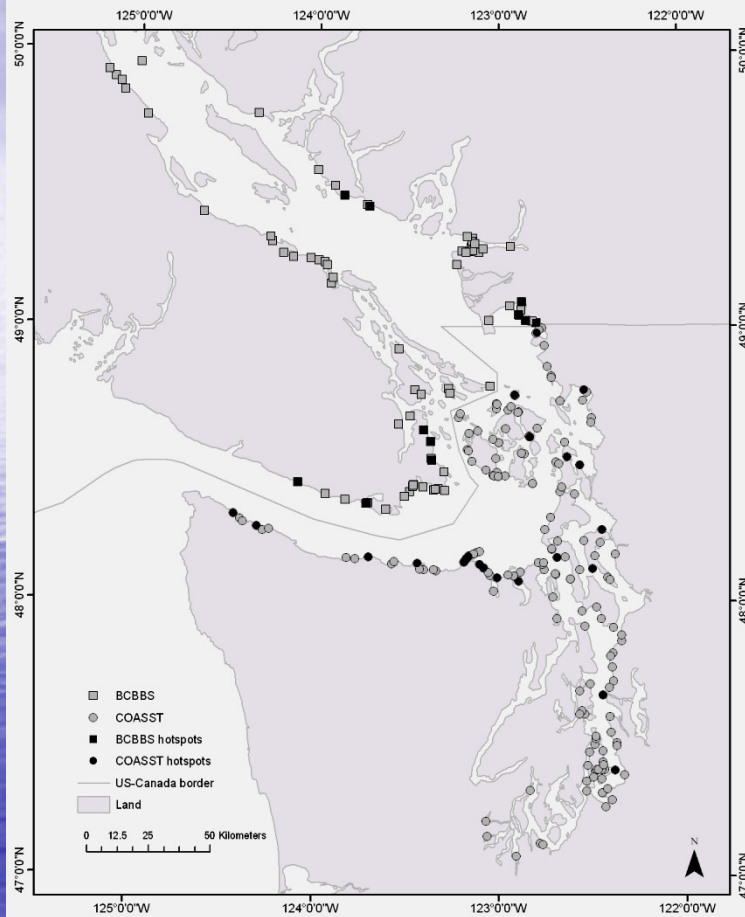
Coastal Observation and Seabird Survey Team

- 11 years old
- 600 volunteers
- 300 beaches
- 4 states
- 23,000 carcasses (~2-4K/y)
- 3 *Beached Birds* field guides
- 12 observer trainings



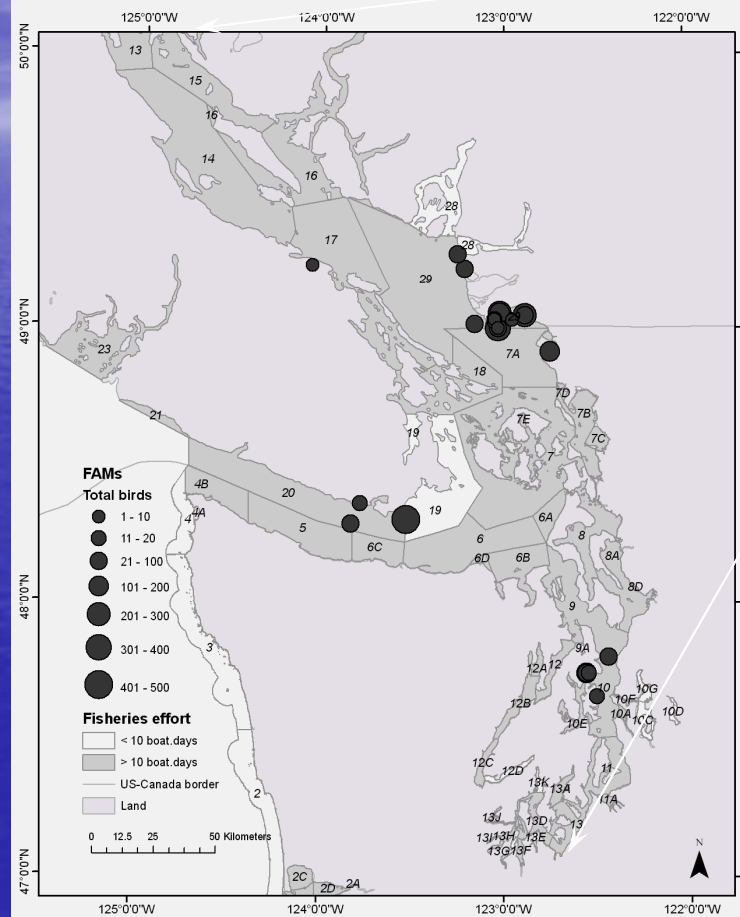
Gillnet fishery bycatch and beached birds

COASST and British Columbia
Beached Bird Survey Sites
(darkened symbols are highest
background encounter rates)



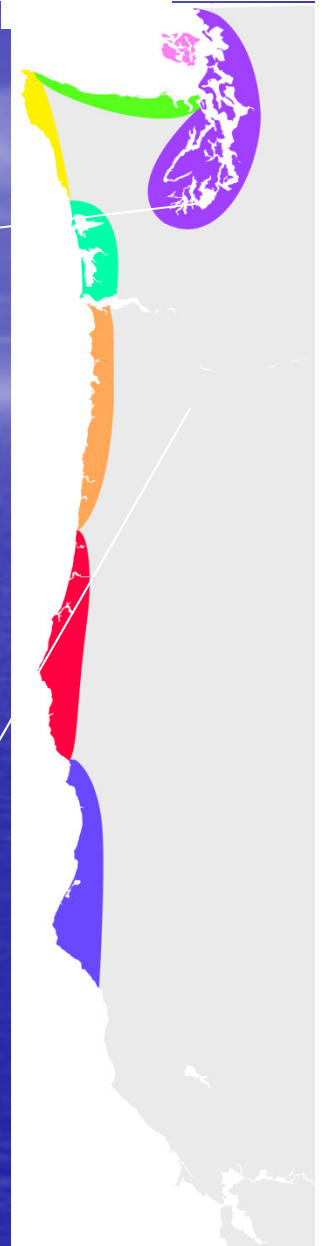
constant - all months and years
regional - all sites
individually small - average $\ll 1$ carcass/km
cumulatively large - 83,000 carcasses/39 years

Fisheries-Associated Seabird
Mortality Events
(information collected from published
and unpublished sources)



infrequent - 12 in 39 years
localized - 1-5km stretches
individually large - average 17 carcasses/km
cumulatively small - 2,225 carcasses/39 years

Hamel et al. 2009. Marine Ornithology 37:41-60.



Free Streamer Line Program, 15K



Tori Lines Distributed 2000 -2009

Type of Lines	Recommended for use on vessels setting...	Number of Kits Distributed					
		2004*	2005	2006	2007	2008	2009
150-foot streamer lines made of 3/16" poly	Snap-on longline gear	N/A	134	44	18	18	14
150-foot streamer lines made of 3/16" poly with detachable streamers	Snap-on longline gear and using gurdies or spools to deploy/retrieve streamer lines	N/A	62	22	22	14	9
300-foot streamer lines made of 3/16" poly	Conventional (stuck) gear	N/A	160	42	46	24	19
300-foot streamer lines made of 3/8" blue steel poly	Conventional (stuck) gear	4076	234	87	240	97	260



Data provided by Pacific States Marine Fisheries Commission

Questions?

